

REMARKS

Claims 1-3 were examined. Claim 2 has been cancelled and new Claims 4-14 have been added to the application, leaving Claims 1 and 3-14 pending. Claims 1-3 were rejected under 35 U.S.C. §102 as being anticipated by Morita et al. U.S. Patent No. 5,478,475. Reconsideration of the application is respectfully requested.

I. Claims 1-6

The Examiner has rejected Claims 1-3 under Section 102(b) as being anticipated by the Morita '475 patent. Claim 2 has been cancelled, and Claim 3 and new Claims 4-6 are dependent on Claim 1.

Claim 1, as amended, is directed to a rotary rinser comprising "a stationary member in which a fluid supply passage is formed" and a "rotary member rotatable about a central axis and disposed to be slidable with respect to the stationary member, the rotary member comprising a first annular projection and a second annular projection together defining an annular groove therebetween, and comprising a discharge passage to move into and out of communication with the supply passage as the rotary member rotates," the sliding surfaces "into which the passages of each set [of passages] open being disposed at different relative elevations and at different radial positions relative to the central axis."

The Morita '475 patent is directed to a fluid distribution apparatus, an artificial moving bed, and a continuous adsorption method. The fluid distribution apparatus of Morita includes a fixed supply valve (3), a rotary valve (4), and a pipe fixing plate (5). The fixed supply valve (3) includes supply nozzle ports (33) to which supply nozzles (32) are attached. Horizontal supply grooves (31) reside on the inner surface of the cylindrical-shaped fixed supply valve (3). Rotary valve (4) includes a fluid distribution section (41) that includes substantially vertical passages (411) and substantially horizontal communication

ports (4111) that connect the passage (411) with one of the supply grooves (31). The fluid distribution section (41) is a circular column that is rotated and is in sliding contact with the inner circumferential surface of the fixed supply valve (3). Rotary valve (4) also includes a communication section (42) that includes communication passages (421) and connecting chambers (422) therein. The fluid supply passages of rotary valve (4) consist of the supply nozzle port (33), the supply groove (31), the communication port (4111), the passage (411) and the communication passage (421). As the rotary valve (4) is rotated, the communication ports (4111) intermittently align with the supply nozzle ports (33) via the supply grooves (31).

The Morita '475 patent, however, does not disclose sets of supply passages and discharge passages which are at different elevations and at different radial positions. Instead, the passages (411) of Morita are "arranged in circle at virtually equal intervals." (Column 6, lines 47-48). Moreover, the rotary valve (4) of Morita does not include a pair of annular projections defining an annular groove therebetween, as amended Claim 1 of the present application recites.

The sliding surfaces into which the passages of each set open being disposed at different elevations and at different radial positions separates the respective passages of each set of passages to prevent mixture of the respective fluids flowing through the passages. The existence of an annular groove also assists in such prevention. These features create a significant advantage over the prior art systems, such as the Morita apparatus, in which it is disadvantageously possible to mix the different fluids with one another due to the ports and fluid junctions being at the same radial position with respect to one another, without the presence of an annular groove.

Accordingly, as the cited prior art is missing multiple elements of Claim 1, the Morita '475 patent does not

anticipate Claim 1, nor would the rotary rinser of Claim 1 have been obvious to one of ordinary skill in the art at the time of invention. For these reasons, Claims 3-6 are likewise allowable, as they are dependent on Claim 1.

II. New Claims 7-14

Claims 7-14 have been added to the application by this amendment. Claim 7 is an independent claim and is directed to a rotary rinser generally comprising a rotary member and a stationary member in slidable engagement with the rotary member. The rotary member is "rotatably moveable about a central axis to a rinsing position" and defines "a first fluid discharge passage and a second fluid discharge passage" and the stationary member defines "a first fluid inlet and a second fluid inlet, the first fluid inlet being in fluid communication with the first fluid discharge passage when the rotary member is in the rinsing position and together defining a first flow junction, the second fluid inlet being in fluid communication with the second fluid discharge passage when the rotary member is in the rinsing position and together defining a second flow junction, the first flow junction disposed at an elevation different than the elevation of the second flow junction, and the first flow junction disposed at a radial position different than the radial position of the second flow junction relative to the central axis."

The disclosure of the Morita '475 patent is discussed in detail above. The Morita '475 patent does not disclose a first flow junction defined by a first fluid inlet and a first fluid discharge passage, and a second flow junction defined by a second fluid inlet and a second fluid discharge passage, where the respective flow junctions are at different elevations with respect to one another and at different radial positions. Instead, the flow junctions of the Morita device are at the same radial positions (along the inner circumference of the fixed supply valve (3) and outer circumference of the rotary valve (4)). As discussed above,


positioning the flow junctions at different elevations and radial positions helps to eliminate the risk of mixing the different fluids with one another during the rinsing process.

Because the cited prior art is missing at least one element of Claim 7, the cited prior art does not anticipate Claim 7. Nor would the rotary rinser of Claim 7 have been obvious to one of ordinary skill in the art at the time of invention based on the cited art. With respect to the dependent claims, Claims 8-14 are allowable for the same reasons as addressed above with respect to Claim 7.

Claim 8 provides that the stationary member "further comprises a chemical liquid stator which is moveable in a substantially vertical direction," Claim 10 provides that the rotary member "further comprises a first annular projection adjacent the first flow junction and a second annular projection adjacent the second flow junction, together defining an annular groove therebetween," Claim 11 recites that "the first annular projection and the second annular projection each define a discharge passage therein," Claim 12 provides that the "first annular projection and the second annular projection define a first sliding surface and a second sliding surface, respectively, the first and second sliding surfaces being disposed immediately adjacent the stationary member" and Claim 14 provides that the rotary rinser further comprises a "nozzle in fluid communication with the first fluid discharge passage and in fluid communication with the second fluid discharge passage." The cited prior art discloses none of the features recited in these claims which, in addition to the reasons set forth above with respect to Claim 4, are allowable for this reason.

The Applicants submit that the present application is in condition for allowance, a notice of which is respectfully solicited.

Respectfully submitted,



Terryence F. Chapman

TFC/LLC/EJR/cc

FLYNN, THIEL, BOUTELL	David G. Boutell	Reg. No. 25 072
& TANIS, P.C.	Terryence F. Chapman	Reg. No. 32 549
2026 Rambling Road	Mark L. Maki	Reg. No. 36 589
Kalamazoo, MI 49008-1631	Liane L. Churney	Reg. No. 40 694
Phone: (269) 381-1156	Brian R. Tumm	Reg. No. 36 328
Fax: (269) 381-5465	Heon Jekal	Reg. No. 64 219
	Eugene J. Rath III	Reg. No. 42 094
	Dale H. Thiel	Reg. No. 24 323
	Sidney B. Williams, Jr.	Reg. No. 24 949

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